



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/406,226 03/17/95 WEBER

R TI-19646

EXAMINER
ATKINSON, C

ART UNIT PAPER NUMBER

3407

DATE MAILED: 11/22/95

RENE E GROSSMAN
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This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 8/31/95 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-20 are pending in the application.
Of the above, claims 13-20 are withdrawn from consideration.
2. ☐ Claims have been cancelled.
3. ☐ Claims are allowed.
4. ☒ Claims 1-12 are rejected.
5. ☐ Claims are objected to.
6. ☐ Claims are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on . Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on , has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed , has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. ; filed on .
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Response to Election

Applicant's election without traverse of species A as illustrated in Figure 1 in Paper No. 3 filed August 31, 1995 is acknowledged.

Claims 13-20 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to a nonelected species. Election was made **without** traverse in Paper No. 3.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3 and 5 are rejected under 35 U.S.C. § 102(a) as being anticipated by Lebailly et al. The patent of Lebailly et al., in Figures 1-3, in column 2, lines 35-48 and in column 4, lines 3-10, discloses a phase change liquid and an aluminum porous material (5) located within a cavity formed by thermally conductive metal plates (1,2). The remaining limitations are considered to be clearly met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

Claims 2, 4 and 6-12 are rejected under 35 U.S.C. § 103 as being unpatentable over Lebailly et al. in view of Alspaugh. The patent of Lebailly et al. discloses all the claimed features of the invention with the exception of a solid to liquid phase change material and the porous material homogeneously disposed within the cavity. The patent of Alspaugh, in Figure 1, in column 2, lines 37-40 and in column 4, lines 17-22, discloses a solid to liquid phase change medium (14) and aluminum filaments (16) being homogeneously mixed for the purpose of obtaining a highly conductive heat storage or removal device. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lebailly et al. a solid to liquid phase change medium and aluminum filaments being

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homogeneously mixed for the purpose of obtaining a highly
conductive heat storage or removal device as disclosed in
Alspaugh.

Conclusion

The prior art made of record and not relied upon is
considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to
Christopher Atkinson whose telephone number is (703) 308-2603
(FAX (703) 305-3463/3464).

C.A.

C.A.

November 6, 1995


JOHN RIVELL
PRIMARY EXAMINER
ART UNIT 347